

5 FULL DUPLEX HEADSET WITH SEPARATE FUNCTION TRANSDUCERS  
FOR NOISY ENVIRONMENTS

ABSTRACT

10 A headset includes two ear pieces: one acting as a microphone, and the other  
as an earphone. Isolated from background noise and vibrations due to bone  
conduction, the microphone ear piece converts voice sounds from the air column in  
the external ear canal into electrical signals. The earphone converts electrical signals  
from a telephony device into audio output in the other ear piece. As a result, the  
headset configuration provides full duplex communication while isolating background  
15 noise.